

ABSTRACT

The present invention provides a first light source (21) that emits light of a first wavelength, that at least either records onto or reproduces information from an information recording medium (30), a light source
5 (22) that emits light of a second wavelength that records onto or reproduces information from an information recording medium (33), a light source (23) that emits light of a third wavelength that records onto or reproduces information from an information recording medium (23), focusing means, an optical element (28) that passes light of the first
10 wavelength and diffracts light of the second and third wavelengths, wherein the optical element (28) is an optical element in which grooves are formed in a substrate, wherein the expression:

$$380 \text{ nm} \leq (n - 1) \times d \leq 420 \text{ nm}$$

is satisfied, where n is a refractive index of the substrate at a
15 wavelength of 400 nm, and d (nm) is a depth per step of the grooves, and wherein the grooves are formed in two steps of depth d and depth $2d$.